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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Cassondra L. Crotty et al.	: Art Unit:	2672
Serial No.:	09/224,696	: Examiner:	Chante E. Harrison
Filed:	January 4, 1999	: Confirmation No.:	3386
For:	METHOD FOR VISUALIZING DATA	: Expedited Procedure	
		: 37 C.F.R. § 1.116	

TECHNICAL DECLARATION

Assistant Commissioner for Patents
Box AF
Washington, DC 20231

S I R :

I, Daria Dooling, declare that:

1. My qualifications to make the comments set forth herein and to draw the conclusions set forth herein are set out in a TECHICAL DECLARATION dated June 11, 2002 that was filed with a RESPONSE dated June 12, 2002.

2. The original disclosure of the above-identified patent application describes *mathematical matrices*.

3. Even through the word "mathematical" does not appear immediately before the word "matrix" in the text of Applicants' specification, one skilled in the art, would readily understand that the original disclosure of the above-identified patent application describes *mathematical matrices*.

4. The statements set forth in Paragraphs 2 and 3 above are supported by the following:

a. As set forth in Applicants' specification at page 9, lines 9 through 13

> "If a data array is sparse, for example, then by visualizing the data array it may be possible to observe certain patterns. Sparsity patterns may lead to the choosing of suitable numerical methods, or

reordering schemes with which to treat the data array" (emphasis added)

"Sparsity" is a characteristic of a "mathematical matrix." One applies a numerical method to something that is "mathematical."

b. As set forth in Applicants' specification at page 12, lines 10 and 11 in connection with the description of an example of the present invention

"Matrices are useful constructs both in theoretical and applied mathematical analysis" (emphasis added).

The example being described, which is also illustrated, is the application of the present invention to electrical network conductance. As indicated, this example of Applicants' invention involves the application of Kirchoff's Current Law (KCL).

"KCL is a conservative law which states that the sum of the currents 'entering' and 'exiting' a node in an electrical network equals zero" (emphasis added)

KCL is a "mathematical" expression.

c. As set forth in Applicants' specification at page 13, lines 7 et seq

"In matrix form the representation of the circuit of Fig. 5 is denoted by the following equation" (emphasis added)

A "mathematical matrix" is described at this point in Applicants' specification.

d. As set forth a page 15, lines 9 et seq

"The following matrix-vector equation G*v = i corresponds to such a reorganization of matrix G for the circuit diagrams of Figs. 7 and 8" (emphasis added)

At this point in Applicants' specification, a "mathematical matrix" is described.

5. Thus, (a) the original disclosure of Applicants' invention is all about mathematical matrices, and (b) one skilled in the art readily recognizes that the description of Applicants' invention in Applicants' original disclosure describes "mathematical matrices."

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted

Daria R Dooling

Daria R. Dooling

April 24, 2003

The Assistant Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. **09-0456 (IBM Corporation)** of any fees associated with this communication.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Box AF, Washington, D.C. 20231 on:

April 30, 2003

Iris M. Cooper